

**In the Claims:**

1-123. (Canceled).

124. (Previously presented) An isolated nucleic acid comprising:

- (a) the nucleic acid sequence of SEQ ID NO:356;
- (b) the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:356;
- or
- (c) the full-length coding sequence of the cDNA deposited under ATCC accession number 203088.

125-128. Canceled.

129. (Previously presented) The isolated nucleic acid of Claim 124 comprising the nucleic acid sequence of SEQ ID NO: 356.

130. (Previously presented) The isolated nucleic acid of Claim 124 comprising the full-length coding sequence of the nucleic acid sequence of SEQ ID NO: 356.

131. (Previously presented) The isolated nucleic acid of Claim 124 comprising the full-length coding sequence of the cDNA deposited under ATCC accession number 203088.

132-134. Canceled.

135. (Previously presented) A vector comprising the nucleic acid of Claim 124.

136. (Previously presented) The vector of Claim 135, wherein said nucleic acid is operably linked to control sequences recognized by a host cell transformed with the vector.

137. (Previously presented) A host cell comprising the vector of Claim 135.

138. (Previously presented) The host cell of Claim 137, wherein said cell is a CHO cell, an *E. coli* or a yeast cell.

139. (Currently amended) An isolated nucleic acid molecule consisting of a fragment of the nucleic acid sequence of SEQ ID NO: 356 or a complement thereof that is at least 20 nucleotides in length, that specifically hybridizes under stringent conditions to:

- (a) the nucleic acid sequence of SEQ ID NO: 356 or a complement thereof; or
- (b) the full-length coding sequence of the cDNA deposited under ATCC accession number 203088 or a complement thereof;

wherein, said stringent conditions use 50% formamide, 5X SSC, 50 mM sodium phosphate (pH 6.8), 0.1% sodium pyrophosphate, 5X Denhardt's solution, sonicated salmon sperm DNA (50 µg/ml), 0.1% SDS, and 10% dextran sulfate at 42°C, and washes at 42°C in 0.2X SSC, at 55°C in 50% formamide followed by a high-stringency wash at 55°C in 0.1X SSC, EDTA; and wherein said isolated nucleic acid molecule is suitable for use as a PCR primer or probe.

140. (Previously presented) The isolated nucleic acid molecule of Claim 139 that is at least 50 nucleotides or above in length.

141. (Previously presented) The isolated nucleic acid molecule of Claim 139 that is at least 60 nucleotides or above in length.

142. (Previously presented) The isolated nucleic acid molecule of Claim 139 that is at least 70 nucleotides or above in length.

143. (Previously presented) The isolated nucleic acid molecule of Claim 139 that is at least 80 nucleotides or above in length.

144. (Previously presented) The isolated nucleic acid molecule of Claim 139 that is at least 90 nucleotides or above in length.

145. (Previously presented) The isolated nucleic acid molecule of Claim 139 that is at least 100 nucleotides or above in length.

146. (New) An isolated nucleic acid having at least 80% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:357;
- (b) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:357, lacking its associated signal peptide;
- (c) the nucleic acid sequence of SEQ ID NO:356;
- (d) the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:356;
- or
- (e) the full-length coding sequence of the cDNA deposited under ATCC accession number 203088;

wherein the polypeptide encoded by said nucleic acid inhibits the uptake of glucose or FFA (free fatty acids) by adipocyte cells.

147. (New) An isolated nucleic acid of Claim 119 having at least 85% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:357;
- (b) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:357, lacking its associated signal peptide;
- (c) the nucleic acid sequence of SEQ ID NO:356;
- (d) the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:356;
- or
- (e) the full-length coding sequence of the cDNA deposited under ATCC accession number 203088;

wherein the polypeptide encoded by said nucleic acid inhibits the uptake of glucose or FFA (free fatty acids) by adipocyte cells.

148. (New) An isolated nucleic acid of Claim 119 having at least 90% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:357;
- (b) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:357, lacking its associated signal peptide;
- (c) the nucleic acid sequence of SEQ ID NO:356;
- (d) the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:356;

or

- (e) the full-length coding sequence of the cDNA deposited under ATCC accession number 203088;

wherein the polypeptide encoded by said nucleic acid inhibits the uptake of glucose or FFA (free fatty acids) by adipocyte cells.

149. (New) An isolated nucleic acid of Claim 119 having at least 95% nucleic acid sequence identity to:

- (a) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:357;
- (b) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:357, lacking its associated signal peptide;
- (c) the nucleic acid sequence of SEQ ID NO:356;
- (d) the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:356;

or

- (e) the full-length coding sequence of the cDNA deposited under ATCC accession number 203088;

wherein the polypeptide encoded by said nucleic acid inhibits the uptake of glucose or FFA (free fatty acids) by adipocyte cells.

150. (New) An isolated nucleic acid of Claim 119 having at least 99% nucleic acid sequence identity to:

(a) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:357;  
(b) a nucleic acid sequence encoding the polypeptide of SEQ ID NO:357, lacking its associated signal peptide;

(c) the nucleic acid sequence of SEQ ID NO:356;

(d) the full-length coding sequence of the nucleic acid sequence of SEQ ID NO:356;

or

(e) the full-length coding sequence of the cDNA deposited under ATCC accession number 203088;

wherein the polypeptide encoded by said nucleic acid inhibits the uptake of glucose or FFA (free fatty acids) by adipocyte cells.